Inspection Report for EPA Site Visit to Environmental Geo Technologies (EGT) Conducted on August 8, 2013.

Report prepared by: Allan Batka

Final Report Date: November 7, 2013

Present during site visit: Dimitrios Papas, President, Helicon Holdings/EGT
Tom Athans, Vice President, Helicon Holdings
Lee Papas, Helicon Holdings/EGT
John Frost, EGT Plant Manager
Donald Anderson, EGT Deep well Operator
Richard Powals, EGT
Jack Lanagan (sp?), MDEQ
Jim Day (sp?), MDEQ
Sam Williams, contractor to USEPA
Allan Batka, USEPA

Purpose of Inspection:

The USEPA conducted this inspection as required by Part I, Section L *("Commencement of Injection")* (2) and (4) of EGT permits: MI-163-1W-C010 & C011. Section (L)(2) requires EPA to inspect all well monitoring equipment and verify that it is operational. Section (L)(4) requires EPA to witness the successful test of the automatic warning and shut-off system under simulated failure conditions. This inspection served as a follow-up to the USEPA inspection conducted on June 26 and 27, 2013, to confirm that deficiencies found during the June site-visit have been corrected.

Inspection Activities on August 8, 2013:

EPA arrived on-site at 12:45 pm and conducted a meeting with EGT to discuss the purpose of the site visit.

In a letter to EGT dated August 2, 2013, USEPA approved the injection of fresh water for the limited purpose of allowing EGT to check the operation of the well injection equipment and monitors, calibrate all well monitoring equipment, and demonstrate the operation of the well monitors to USEPA inspectors. This approval was for the time period beginning August 5, 2013 and concluding August 8, 2013.

During injection of fresh water into well #1, EPA observed the operation of the following monitors: injection pressure (152 psi), annulus pressure (370 psi), differential pressure (219 psi), flow (4.6 gpm), monthly volume (145 gal.), temperature, and pH. The monthly volume of 145 gal identified the injection of fresh water from 8/5/13 to 8/8/13.

EGT personnel explained that the well head leak on well #1 during USEPA's site visit on June 26 & 27, 2013 was repaired. EGT explained that a flange on the well head was tightened to stop the leak. EGT confirmed that this work did not release the annulus pressure or move the packer assembly. At this time, USEPA inspected well #1 and did not observe any leaks at the well head.

EGT began injection of fresh water into well #2. At this time the pipe to the inlet (vacuum) side of pump #2 became disconnected. EGT placed a temporary inlet pipe to pump #2 and began injection into well #2. USEPA observed the operation of the following monitors during injection: injection pressure (151 psi), annulus pressure (343 psi), differential pressure (191 psi), flow (8.02 gpm), daily volume (535 gal.), monthly volume (2796 gal), pH (6.86), temperature (76.4 F). The monthly flow of 2796 gal identified injection of fresh water from 8/5/13 to 8/8/13.

EGT conducted a simulated well failure to test the operation of the automatic alarm/shut off controls for well #2. The permitted maximum injection pressure for well #2 is 765 psi and minimum annulus pressure is 100 psi. The audio/visual alarm for well #2 was triggered when the injection pressure reached 699 psi. The #2 pump for well #2 shut down when the injection pressure reached 746 psi. The audio/visual alarm for the annulus pressure on well #2 was triggered when the annulus pressure was reduced to 150 psi. The #2 pump for well #2 shut down when the annulus pressure was between 150 psi and 100 psi.

USEPA inspected the location of the corrosion monitoring spool and coupons. The spool and coupons are located in the outlet pipe from the Secondary Storage Tank. This location is consistent with the updated corrosion monitoring plan. USEPA approved the updated corrosion monitoring plan in a letter to EGT dated August 21, 2013.

USEPA received the calibration records for all of the well monitors. Mr. Frost explained that the monitor calibration was performed during the USEPA approved injection of fresh water during the time period of 8/5/13 to 8/8/13.

A discussion to confirm the dimensions of the bottom of the injection tubing and packer in well #'s 1 & 2 was held with Richard Schildhouse of Subsurface (by telephone), Tom Athans, Richard Powals, and Allan Batka.

Conclusion:

Based on the information collected during the June 26 and 27, 2013 and the August 8, 2013 inspections, USEPA has concluded that EGT has satisfied the requirements of Part I, Section L *("Commencement of Injection")* (2) and (4) of EGT permits: MI-163-1W-C010 & C011.